

FACT SHEET

GENERAL KPDES PERMIT FOR CONCENTRATED ANIMAL FEEDING OPERATIONS DAIRY FACILITIES

KPDES No.: KYA400000
Date: February 15, 2000

1. COVERAGE UNDER THIS GENERAL PERMIT

B. Permit Coverage Area

This permit covers all areas of the Commonwealth of Kentucky.

C. Operations Eligible for Coverage

This permit covers all new and existing dairy operations classified as Concentrated Animal Feeding Operations (CAFOs) except those identified below. Dairy operations not classified as CAFOs are not required to have coverage under this general permit.

D. Limitations on Coverage

The following operations are not authorized by this permit:

- E. CAFOs that are subject to an existing individual KPDES permit or which are issued a permit in accordance with 1.D.2. Such CAFOs may be authorized under this permit after an existing permit expires, provided the existing permit did not establish more strict numeric limitations.
- 1. CAFOs that the Director has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard, or to the impairment of a 303(d) listed basin. Such CAFOs will be required to submit an application for an individual KPDES permit in accordance with 1.D.2.
- 2. CAFOs that could discharge into a surface water, which has been classified as an Exceptional or Outstanding State or National Resource Water. Such CAFOs will be required to submit an application for an individual KPDES permit in accordance with 1.D.2.
- 3. CAFOs in excess of 1,500 animal units. Such CAFOs will be required to submit an application for an individual KPDES permit in accordance with 1.D.2.

F. Authorization to Operate

CAFOs must submit a Notice of Intent (NOI) in accordance with the requirements of 2.A in order to be authorized to operate under this general permit.

1. Unless notified by the Director to the contrary, owners or operators who submit the above notification are authorized to operate under the terms and conditions of this permit upon receipt of written notification of coverage from the Division of Water.
2. The Director may deny coverage under this general permit and require submittal of an application for an individual KPDES permit based on a review of the NOI and/or other information.

2. GENERAL PERMIT COVERAGE REQUIREMENTS

A. NOI Submittal

1. New CAFOs desiring to be authorized to operate under this general permit shall submit an NOI prior to beginning animal feeding operations at the facility. Existing CAFOs shall submit an NOI as soon as possible.
2. When the ownership of an operation covered by this permit changes, the new owner or operator must submit an NOI in accordance with the requirements of this permit within 48 hours of the change.
3. A signed copy of the NOI and a USGS topographical map must be submitted to the Inventory and Data Management Section of the KPDES Branch at the following address:

Kentucky Division of Water
KPDES Branch
Inventory and Data Management Section
14 Reilly Road
Frankfort, Kentucky 40601

B. Renotification

Upon reissuance of a new general permit, the permittee is required to notify the Director of his intent to be covered under the new permit.

C. Notice of Termination

In the event of an elimination of all animal feeding operations at the facility, the owner or operator may submit a Notice of Termination (NOT) in order to terminate coverage under this general permit and nullify its requirements. NOTs are to be sent to the above address. The owner or operator of a facility may also submit an NOT when the ownership of that facility changes. The new owner or operator must submit an NOI in accordance with 2.A.3.

3. ADDITIONAL INFORMATION

A. Construction Permit

Before constructing any type of liquid manure handling system, a construction permit must be obtained from the Division of Water. For information on how to obtain a permit, contact the KPDES Branch, of the Division of Water, at (502) 564-3410. This requirement applies to both new and existing operations.

G. Common Ownership

Two (2) or more adjacent facilities under common ownership shall be considered one (1) operation for the purposes of determining applicability of this permit, according to the number of animal units present.

4. PROPOSED OPERATIONAL REQUIREMENTS AND LIMITATIONS

Dairy Operations

Description of Proposed Discharge	Effluent Characteristic	Proposed Limitations		Applicable Water Quality Criteria and/or Effluent Guideline
		Monthly Average	Daily Maximum	
Process Wastewater*		No Discharge		40 CFR Part 412, Subpart A
Process Wastewater Overflow**	Flow	Report	Report	401 KAR 5:065, Section 2(8)
	Total Suspended Solids	Report	Report	401 KAR 5:065, Section 2(8)
	Fecal Coliform	Report	Report	401 KAR 5:065, Section 2(8)
	Biochemical Oxygen Demand	Report	Report	401 KAR 5:065, Section 2(8)
	Total Phosphorus	Report	Report	401 KAR 5:065, Section 2(8)
	Dissolved Phosphorus	Report	Report	401 KAR 5:065, Section 2(8)
	Ammonia Nitrogen	Report	Report	401 KAR 5:065, Section 2(8)
	Total Kjeldahl Nitrogen	Report	Report	401 KAR 5:065, Section 2(8)
	Nitrate Nitrogen	Report	Report	401 KAR 5:065, Section 2(8)
	Temperature	Report	Report	401 KAR 5:065, Section 2(8)
	pH	Report	Report	401 KAR 5:065, Section 2(8)

Nonprocess wastewater (runoff from land application areas) shall not cause or contribute to any water quality violation.

*Process wastewater includes any process generated wastewater and any precipitation (rain or snow) which comes into contact with manure (prior to land application), bedding, or any other material or product used in or resulting from the production of animals, or direct products thereof (milk).

**Process wastewater overflow may be discharged whenever rainfall events, either chronic or catastrophic, cause an overflow of process wastewater from a facility designed, constructed, and operated to contain all process generated wastewater plus the runoff from a 25-year, 24-hour rainfall event.

5. METHODOLOGY USED IN DETERMINING LIMITATIONS

A. Justification of Limits

The following regulations are pursuant to KRS 224.10-100, 224.70-100, and 224.70-110.

Flow, Total Suspended Solids, Fecal Coliform, Biochemical Oxygen Demand, Total Phosphorus, Dissolved Phosphorus, Ammonia Nitrogen, Total Kjeldahl Nitrogen, Nitrate Nitrogen, Temperature, and pH - The monitoring requirements for these parameters are consistent with 401 KAR 5:065, Section 2(8).

BMP Plan:

This requirement is consistent with 401 KAR 5:065, Section 2(10).

Antidegradation:

The conditions of 401 KAR 5:029, Section 2(1) and (3) have been satisfied by this permit action. A review under Section 2(2) and (4) is not applicable.

B. Monitoring Requirements

<u>Parameter</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow	1/Discharge	Estimate
Total Suspended Solids	1/Discharge	Grab
Fecal Coliform	1/Discharge	Grab
Biochemical Oxygen Demand	1/Discharge	Grab
Total Phosphorus	1/Discharge	Grab
Dissolved Phosphorus	1/Discharge	Grab
Ammonia Nitrogen	1/Discharge	Grab
Total Kjeldahl Nitrogen	1/Discharge	Grab
Nitrate Nitrogen	1/Discharge	Grab
Temperature	1/Discharge	Grab
pH	1/Discharge	Grab

6. PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS

The permittee shall attain compliance with the permit conditions upon notification of coverage under this general permit.

7. PERMIT DURATION

Five (5) years.

8. THE ADMINISTRATIVE RECORD

The administrative record, including application, draft permit, fact sheet, public notice, comments received, and additional information is available from the Division of Water at 14 Reilly Road, Frankfort office Park, Frankfort, Kentucky 40601.

9. REFERENCES AND CITED DOCUMENTS

All material and documents referenced or cited in this fact sheet are either a part of the administrative record as described above or are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

10. CONTACT PERSON

Additional information concerning this permit may be obtained at the address noted in item 8 from Ronnie Thompson at (502) 564-2225, extension 423.

11. PUBLIC NOTICE INFORMATION

Please refer to the attached Public Notice for details regarding the procedures for a final permit decision, deadline for comments, and other information required by KAR 5:075, Section 4(2)(e).

PERMIT NO.: KYA400000

**GENERAL KPDES PERMIT FOR CONCENTRACTED ANIMAL FEEDING OPERATIONS
DAIRY FACILITIES**

In compliance with the provisions of the Kentucky Revised Statutes Chapter 224 and pursuant to 401 KAR 5:055, Section 5, the following operations are authorized:

This permit covers all new and existing dairy operations, classified as Concentrated Animal Feeding Operations (CAFOs), that are required to have a permit pursuant to 401 KAR 5:055, Section 1 and KRS 224.16-050.

Specifically excluded from authorization under this permit are operations that:

- H. Are subject to an existing individual KPDES permit or which are issued a permit in accordance with 1.D.2.
- 2) The Director has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard or to the impairment of a 303(d) listed basin.
- 3) Could discharge into a surface water, which has been classified as an Exceptional or Outstanding State or National Resource Water.
- 4) Are in excess of 1,500 animal units.

The receiving waters for any discharge authorized by this permit are located within the political boundaries of the Commonwealth of Kentucky. Such authorization is in accordance with the effluent limitations and other conditions set forth in PARTS I, II, III, and IV hereof. This permit consists of this cover sheet, PART I 3 pages, PART II 1 page, PART III 1 page and PART IV 3 pages.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to operate a dairy facility of more than 1,000 animal units.*

Discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	kg/day(lbs/day)		Other Units(Specify)		Measurement <u>Frequency</u>	Sample <u>Type</u>
	Monthly <u>Avg.</u>	Daily <u>Max.</u>	Monthly <u>Avg.</u>	Daily <u>Max.</u>		

THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER**

There shall be no discharge of process wastewater with the following exception: process wastewater overflow may be discharged whenever rainfall events, either chronic or catastrophic, cause an overflow of process wastewater from a facility designed, constructed, and operated to contain all process generated wastewater plus the runoff from a 25-year, 24-hour rainfall event. Any such discharge shall be monitored in accordance with the effluent limitations and monitoring requirements of PART I, Page I-2.

Nonprocess wastewater (runoff from land application areas) shall not cause or contribute to any water quality violation.

*Animal Units = (Number of mature dairy cattle X 1.4). Dairy operations with less than 1,000 animal units present may be classified as CAFOs at the discretion of the agency.

**Process wastewater includes any process generated wastewater and any precipitation (rain or snow) which comes into contact with manure (prior to land application), bedding, or any other material or product used in or resulting from the production of animals, or direct products thereof (milk).

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge process wastewater overflow* only from a dairy facility of more than 1,000 animal units.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	kg/day(lbs/day) Monthly Avg.	Daily Max.	Other Units(Specify) Monthly Avg.	Daily Max.	Measurement Frequency	Sample Type**
Flow (gallons)	Report	Report	N/A	N/A	1/Discharge	Estimate
Total Suspended Solids (mg/l)	N/A	N/A	Report	Report	1/Discharge	Grab
Fecal Coliform (N/100)	N/A	N/A	Report	Report	1/Discharge	Grab
Biochemical Oxygen Demand 5-day (mg/l)	N/A	N/A	Report	Report	1/Discharge	Grab
Total Phosphorus (mg/l)	N/A	N/A	Report	Report	1/Discharge	Grab
Dissolved Phosphorus (mg/l)	N/A	N/A	Report	Report	1/Discharge	Grab
Ammonia Nitrogen (mg/l)	N/A	N/A	Report	Report	1/Discharge	Grab
Total Kjeldahl Nitrogen (mg/l)	N/A	N/A	Report	Report	1/Discharge	Grab
Nitrate Nitrogen (mg/l)	N/A	N/A	Report	Report	1/Discharge	Grab
Temperature (°F)	N/A	N/A	Report	Report	1/Discharge	Grab
pH (standard units)	N/A	N/A	Report	Report	1/Discharge	Grab

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: overflow from retention structure, but prior to actual discharge or mixing with receiving waters.

*Process wastewater overflow may be discharged whenever rainfall events, either chronic or catastrophic, causes an overflow of process wastewater from a facility designed, constructed, and operated to contain all process generated wastewater plus the runoff from a 25-year, 24-hour rainfall event.

**Sample must be taken during the first 30 minutes of discharge, if possible. If conditions are not safe for sampling (ex. local flooding, high winds, electrical storms, etc.), the permittee shall collect a sample once dangerous conditions have passed and must provide documentation as to why timely samples could not be collected.

C. Schedule of Compliance

The permittee shall achieve compliance with all requirements of this permit in accordance with the following schedule:

Attain compliance with effluent limitations upon notification of coverage under this general permit.

STANDARD CONDITIONS FOR KPDES PERMIT

A. General Conditions

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit.

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

B. Additional Conditions

1. This permit is limited to no point source discharge of process wastewater from the facility, except whenever rainfall events, either chronic or catastrophic, cause an overflow of process wastewater from a facility designed, constructed, and operated to contain all process generated wastewater plus the runoff from a 25-year, 24-hour rainfall event.
2. This permit shall not be construed as authorizing any operation which is otherwise in contravention of any law, regulation, ordinance, or order of any governmental unit.
3. This permit shall be subject at all times to revocation or modification by the Kentucky Natural Resources and Environmental Protection Cabinet as set forth in KRS 224.
4. Nothing herein shall be construed to authorize the creation or maintenance of a nuisance, or to relieve the permittee from any penalty for violation of any law or regulation.
5. The land application of wastewater and solids shall be of a sufficiently low rate as to prevent any runoff to waters of the Commonwealth.
6. Whenever, by reason of emergency or accident, a spill or discharge occurs which results in pollution of the waters of the Commonwealth, the Division of Water shall be notified by the most rapid means available at 1-(800) 928-2380.

PART III

OTHER REQUIREMENTS

A. Reporting of Monitoring Results

In the event that process wastewater overflow is discharged, the results of the analysis required by PART I.B shall be submitted to the Division of Water within 30 days of the discharge at the address below:

Kentucky Division of Water
KPDES Branch
Inventory and Data Management Section
14 Reilly Road
Frankfort, Kentucky 40601

A copy of the results shall also be submitted to the appropriate Division of Water Regional Office. A list of Division of Water Regional Offices and the counties that they serve is included as Attachment A.

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:080 and KRS 224, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
2. Controls any pollutant not limited in this permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

C. Individual Permits

1. Any permittee authorized by this permit may request to be excluded from the coverage of this general permit by applying for an individual permit. The permittee shall submit the appropriate KPDES application forms (Form 1 and Form B) together with the reasons supporting the request to the Division of Water.
2. When an individual KPDES permit is issued to a permittee otherwise subject to this general permit, the applicability of this permit to that owner or permittee is automatically terminated on the effective date of the individual permit.
3. A source excluded from coverage under this general permit solely because it already has an individual permit may request that its individual permit be revoked, and that it be covered by this general permit. Upon revocation of the individual permit, this general permit shall apply to the source.

PART IV
BEST MANAGEMENT PRACTICES

SECTION A. GENERAL CONDITIONS

1. BMP Plan

The permittee shall develop and maintain a Best Management Practices (BMP) Plan consistent with 401 KAR 5:065, Section 2(10), pursuant to KRS 224.70-110, which prevents or minimizes the potential for the release of pollutants into the environment.

2. Implementation

The plan shall be in place as soon as possible after notification of coverage under this general permit.

3. General Requirements

The BMP Plan shall be in accordance with all applicable Best Management Practices contained in the Kentucky Agriculture Water Quality Plan for livestock. These Best Management Practices may be incorporated into the BMP Plan by reference. The Plan should be in narrative form, and include any necessary plot plans, drawings, or maps.

4. Specific Requirements

A. Visual Inspections and Additional Monitoring

The permittee shall make annual visual inspections of the waste handling facilities and of all land application areas in order to evaluate whether the BMP Plan is being adequately and properly implemented in accordance with the terms of this permit or whether additional control measures are needed. The permittee shall also take the following measurements and samples in accordance with the schedule set out below:

<u>Frequency</u>	<u>Measure</u>
Daily	Precipitation - The permittee shall maintain an on site rain gauge
Daily	Amount of waste land applied and the number of acres utilized
Weekly	Lagoon freeboard - For solid waste structures, report the percentage of capacity remaining
Annually	Nitrogen and phosphorus content of process wastewater*
Annually	Nitrogen and phosphorus content of soil in land application fields*

*For new CAFOs, the permittee shall analyze the process wastewater and soils prior to the first land application event and once a year thereafter. For existing CAFOs, the permittee shall analyze the process wastewater and soils prior to the first crop growing season, after coverage under this permit begins, and once a year thereafter.

The results of the annual inspections, the daily and weekly measurements, and annual analysis shall be kept in a log maintained at the facility and shall be made available to representatives of the Division of Water upon request.

B. Siting Criteria

The following siting criteria shall apply to all land application areas and to all new or expanded barns and lagoons.

SETBACK FEATURE ⁽³⁾	BARN, LAGOON	LAND APPLICATION AREA	
		Injection	Other Method
Dwelling not owned by applicant, church, school, schoolyard, business, other structure to which the general public has access, park ⁽⁴⁾	1,500 feet	500 feet	1,000 feet
Incorporated city limit ⁽⁴⁾⁽⁵⁾	3,000 feet	1,000 feet	2,000 feet
Lake, river, blue-line stream, karst feature	150 feet	75 feet	150 feet
Water well not owned by applicant ⁽⁴⁾	300 feet	150 feet	150 feet
Downstream ⁽¹⁾ water listed in 401 KAR 5:030 as exceptional water or outstanding national resource water; or outstanding state resource water ⁽²⁾	1 mile	750 feet	1,500 feet
Downstream ⁽¹⁾ public water supply surface water intake	5 miles	1 mile	1 mile
Roadways, primary (state and federal)	150 feet	75 feet	150 feet
Roadways, secondary (county)	150 feet	75 feet	150 feet

⁽¹⁾ Measured along gradient

⁽²⁾ Designated outstanding state resource waters are listed in 401 KAR 5:026

⁽³⁾ Measured from the edge of the barn, lagoon, or land application area to the nearest edge of the setback feature

⁽⁴⁾ Existing at the time the first KPDES permit is issued

⁽⁵⁾ For existing operations, land application setbacks do not apply

A barn or lagoon shall not be located in:

1. A state or national park or forest, or nature preserve.
2. A wellhead protection area approved by the Cabinet pursuant to 401 KAR 4:220.
3. A 100-year floodplain, unless permitted pursuant to 401 KAR 4:060.
4. A jurisdictional wetland as determined by the Natural Resources Conservation Service (NRCS).
5. A sinkhole or other enclosed depression where subsidence is evident.

A land application area shall not be located in:

1. A state or national park or forest, or nature preserve.
2. A wellhead protection area approved by the Cabinet pursuant to 401 KAR 4:220.

C. Comprehensive Nutrient Management Plan

The permittee shall develop and maintain a site specific Comprehensive Nutrient Management Plan (CNMP), which uses the most recent Natural Resource Conservation Service (NRCS) guidelines for waste management as a basis. The primary purpose of the plan is to achieve the correct nutrient level (nitrogen and phosphorus) needed to grow the planned crop by balancing the nutrients already in the soil with the nutrients in the manure that is land applied. The CNMP should prevent the application of nutrients at rates that will exceed the capacity of the soil and crops to assimilate them. The CNMP should address the timing and method of land application activities and must specify how land application activities will comply with the applicable siting criteria.

The plan shall be prepared and implemented by January 1, 2003. The permittee shall maintain a copy of the CNMP on site and shall make the plan available to representatives of the Division of Water upon request. Within 30 days of finalization of the plan, a report shall be sent to the Division of Water at the address below. The report will provide a brief summary of the CNMP and provide for documentation that the plan has been prepared. The report shall contain a statement certifying that the CNMP meets all applicable permit requirements and must be signed by the permittee.

Kentucky Division of Water
KPDES Branch
Inventory and Data Management Section
14 Reilly Road
Frankfort, Kentucky 40601

5. Documentation

The permittee shall maintain a copy of the BMP Plan at the facility and shall make the plan available to representatives of the Division of Water upon request.

6. Plan Modification

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the release of pollutants.

7. Modification for Ineffectiveness

If the BMP Plan proves to be ineffective in achieving the general objective of preventing the release of pollutants into the environment, then the permit and/or the BMP Plan shall be subject to modification to incorporate revised BMP requirements. If at any time following the issuance of this permit, the BMP plan is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to resolve the concern.

SECTION B. SPECIFIC CONDITIONS

N/A